## What is claimed is:

1. A method of providing first and delayed second modulator signals for modulation of a quadrature amplitude modulated signal, such method comprising the steps of:

detecting a phase difference relating the first and second modulator signals;

filtering the detected phase difference;

adjusting the phase difference between the first and second modulator signal based upon the filtered, detected phase difference to a phase difference value equal to ninety degrees divided by a modulator multiplier value for quadrature subharmonic modulation of the quadrature amplitude modulated signal.